What is claimed is:

1. A media advancing device for a hardcopy apparatus comprising:

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at least one roller having an outer surface and being rotatable for advancing media, said outer surface comprising a plurality of openings and a contact region for engaging said media; and

a negative pressure mechanism for creating

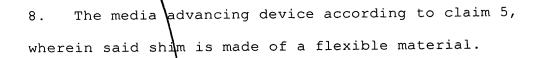
10 negative pressure through at least a portion of said openings.

- The media advancing device according to claim 1, wherein said negative pressure mechanism comprises at
 least one vacuum source in communication with at least one vacuum chamber, wherein said vacuum chamber is in communication with at least a portion of said openings.
- 3. The media advancing device according to claim 1,
 20 wherein said roller is partially housed in at least one slot in said negative pressure mechanism such that said

openings provide an entrance for air through said slot into said negative pressure mechanism.

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- 4. The media advancing device according to claim 2, wherein said roller is partially housed in at least one slot above said vacuum chamber, and said openings are in said contact region and provide the only entrance for air through said slot into said vacuum chamber.
- 10 5. The media advancing device according to claim 4, further comprising at least one shim disposed above said slot and having a gap, said gap aligning over at least a portion of said contact region.
- of transverse rib forming a plurality of smaller gaps.
- 7. The media advancing device according to claim 6, 20 wherein said smaller gaps are about equal in size.



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9. The media advancing device according to claim 1, wherein said openings are circular.

- 10. The media advanding device according to claim 1, wherein said openings are equidistantly spaced apart.
- 10 11. The media advancing device according to claim 1, wherein said outer surface further comprises a coating having a high coefficient of friction.
- 12. The media advancing device according to claim 1,

 wherein said roller further comprises at least one
 axial exhaust and said negative pressure mechanism

 comprises at least one vacuum source in communication

 with said axial exhaust, said axial exhaust being in

 communication with at least a portion of said openings.

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13. A media advancing device for a hardcopy apparatus comprising:



at least one roller having an outer surface with a contact region for engaging media and rotatable for advancing said media; and

Children 2

a negative pressure mechanism for creating negative pressure that is radial to at least a portion of said contact region.

14. The media advancing device according to claim 13, wherein said outer surface further comprises a plurality of openings and said negative pressure mechanism comprises at least one vacuum source in communication with at least one vacuum chamber, said vacuum chamber being in communication with at least a portion of said openings.

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- 15. The media advancing device according to claim 14, wherein said roller is partially housed in at least one slot in said negative pressure mechanism such that said openings provide an entrance for air through said slot into said negative pressure mechanism.
- 16. The media advancing device according to claim 14, wherein said roller is partially housed in at least one



slot above said vacuum chamber, and said openings are in said contact region and provide the only entrance for air through said slot into said vacuum chamber.

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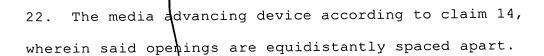
17. The media advancing device according to claim 16, further comprising at least one shim disposed above said slot and having a gap, said gap aligning over at least a portion of said contact region.

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- 18. The media advancing device according to claim 17, wherein said shim further comprises at least one transverse rib forming a plurality of smaller gaps.
- 15 19. The media advancing device according to claim 18, wherein said smaller gaps are about equal in size.
 - 20. The media advancing device according to claim 17, wherein said shim is made of a flexible material.

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21. The media advancing device according to claim 14, wherein said openings are circular.



5 23. The media advancing device according to claim 13, wherein said outer surface further comprises a coating paving a high coefficient of friction.

- 24. The media advancing device according to claim 13,

 10 wherein said roller further comprises at least one
 axial exhaust, said outer surface further comprises a
 plurality of openings and said negative pressure
 mechanism comprises at least one vacuum source in
 communication with said axial exhaust, said axial

 15 exhaust being in communication with at least a portion
 of said openings.
 - 25. A method of advancing a media in a hardcopy apparatus comprising:
- advancing a media to contact the contact region on a roller having a plurality of openings;





generating a negative pressure distribution between said media and said contact region wherein said negative pressure is through at least a portion of said openings in said contact region;

5 further advancing said media by rotating said roller.